

Project No. 1251-100
Crude Oil Tank Farms Project, Agrood Area 30 (Module-1)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

Sr.	Pre-Commissioning and Commissioning Dossier Index	Applicable (Yes/No)
1	Mechanical Completion Certificate (MCC)	
2	Ready for Startup Certificate (RFSU)	
3	System Punch Lists	
4	System Limits Marked Up P&ID	
5	System Index	
6	Piping Pre-Commissioning	
	6.01) Piping Test Packs	
	6.02) Piping Pre-commissioning Check Lists	
7	Piping Commissioning	
	7.01) Service Test, GLT, CLT and N2 Purging Certificates	
	7.02) Piping Commissioning Check Lists	
Sr.	Pre-Commissioning and Commissioning Dossier Index	Applicable (Yes/No)
8	Mechanical Pre-Commissioning	
	8.01) System Mechanical Index	
	8.02) Equipment Drawings	
	8.03) Equipment Datasheets	
	8.04) Boxing-up Certificates	

	8.05) Grouting Certificates	
	8.06) Pre-Alignment Certificates	
	8.07) Mechanical Pre-Commissioning Checklists	
9	Mechanical Commissioning	
	9.01) Final Alignment Certificates	
	9.02) Motor Solo Run Certificates	
	9.03) Mechanical Run Test (MRT) Certificates	
	9.04) Mechanical Commissioning Checklists	
	9.05) Mechanical Supplier Check Lists & Reports	
10	Instrumentation Pre-Commissioning	
	10.01) System Instrument Index	
	10.02) Instrument Data Sheets	
	10.03) Instrument Cable Schedule	
	10.04) System Instrumentation Wiring Diagram	
	10.05) Hook-up Drawing (Mechanical & Pneumatic)	
	10.06) Instruments Cables Schedule	
	10.07) Instruments Cables Laying Certificates	
	10.08) Instruments Cables Termination Certificates	
	10.09) Instruments Cables Testing Certificates	
	10.10) Instruments Calibration Certificates	
	10.11) Instrument Loop Checks Certificates	
	10.12) Instrumentation Pre-Commissioning Check Lists	
	10.13) Instrumentation Supplier Check Lists & Reports	
11	Instrumentation Commissioning	
	11.01) Instrumentation Function Test Certificates	
	11.02) Instrumentation Supplier Check Lists & Reports	
Sr.	Pre-Commissioning and Commissioning Dossier Index	Applicable (Yes/No)
12	Electrical Pre-Commissioning	
	12.01) System Electrical Index	
	12.02) Electrical Drawings	
	12.03) Motor Datasheets	
	12.04) Electrical Cables Schedule	
	12.05) Electrical Cables Laying Certificates	
	12.06) Electrical Cables Testing Certificates	
	12.07) Electrical Cables Termination Certificates	
	12.08) FAT Reports & Certificates	
	12.09) SAT Reports & Certificates	
	12.10) Electrical Pre-Commissioning Check Lists	
	12.11) Electrical Supplier Check Lists & Reports	

13	Electrical Commissioning	
	13.01) Electrical -Commissioning Check Lists	
	13.02) Electrical Supplier Check Lists & Reports	
14	Red Marked-up Drawings	
	14.01) P&ID	
	14.02) Instrumentation Drawings	
	14.03) Electrical Drawings	

[illegible]



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



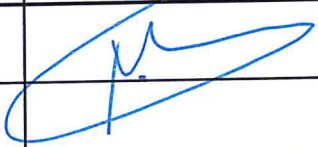


System ID	030-LP-009
System Description	Transformers & pumps water spray system

1-Mechanical Completion Certificate (MCC)

**SYSTEM MECHANICAL COMPLETION CERTIFICATE
(MCC)****PROJECT TITLE** : CRUDE OIL TANK FARM(AGROOD AREA)**PROJECT No** : 1251-100**SYSTEM NAME** : Transformers & pumps water spray system**SYSTEM ID** : 030-LP-009**THIS IS TO CERTIFY THAT:**

- THE ABOVE SYSTEM HAS BEEN FABRICATED, ERECTED, INSTALLED AND TESTED TO THE REQUIREMENTS OF THE CONTRACT DRAWINGS, SPECIFICATIONS, THE APPLICABLE CODES AND STANDARDS.
- ALL PRE-COMMISSIONING RELEVANT ACTIVITIES, TESTS, INSPECTIONS AND CHECKS HAVE BEEN CARRIED OUT FOR THIS SYSTEM AND FOUND ACCEPTABLE.
- Q/C DOCUMENTATION OF THE ABOVE SYSTEM HAS BEEN AUDITED BY THE CUSTOMER SITE QUALITY CONTROL AND FOUND COMPLETED.
- ALL PUNCH LIST ITEMS CATEGORY (A) IN THIS SUBSYSTEM WERE CLEARED.
- THIS SYTEM IS MECHANICALLY COMPLETED ON THE DATE 13/07/2021 AND READY FOR COMMISSIONING (RFC) WITH THE FOLLOWING EXCEPTIONS.

EXCEPTIONS :**NOTE: ACCEPTANCE OF THE ABOVE SYSTEM DOES NOT RELIEVE ENPPI/CONSTRUCTION CONTRACTOR FROM THEIR CONTRACTUAL OBLIGATIONS AND RESPONSIBILITIES.**

COMPANY	PETROJET	ENPPI	PPC
NAME	M.abdallah		
TITLE	P.C engineer		
SIGNATURE			
DATE	13/07/2021		



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

2- Ready for Startup Certificate (RFSU)

READY FOR START UP CERTIFICATE

PROJECT TITLE : EGPC CRUDE OIL TANK FARMS PROJECT (AGROOD-020)

PROJECT No. : 1251-100

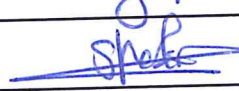

SYSTEM /AREA /PLANT : Transformers & pumps water spray system

SYSTEM /AREA /PLANT No. : 030-LP-009

THIS IS TO CERTIFY THAT:

- THE MENTIONED SYSTEM /AREA /PLANT IS READY FOR START UP WHERE ALL MECHANICAL WORKS, PRECOMMISSIONING AND COMMISSIONING ACTIVITIES HAVE BEEN SUCCESSFULLY COMPLETED.
- MECHANICAL COMPLETION CERTIFICATE(S) FOR THE MENTIONED SYSTEM / AREA / PLANT HAVE BEEN SIGNED.
- ISSUANCE OF THIS READY FOR START UP CERTIFICATE(S) SHALL NOT RELIEVE CONTRACTOR(S) FROM THEIR OBLIGATIONS TO COMPLETE THE REMAINING SYSTEMS NOR FROM THEIR WARRANTY OBLIGATIONS AND OTHER PROVISIONS OF THE CONTRACT.
- THE FOLLOWING EXCEPTIONS AGREED TO BE CLEARED AFTER START UP AND WILL NOT PREVENT START UP ACTIVITIES.

EXCEPTIONS :

COMPANY	CONSORTIUM	PPC
NAME	Ahmed El Shafie	M. Saven
TITLE	Commissioning Manager	Site Manager
SIGNATURE		
DATE	28-8-2021	31/08/2021



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

3- System Punch Lists

PUNCH LIST

PROJECT TITLE : CRUDE OIL TANK FARM(AGROOD AREA)

PROJECT NUMBER : 1251-100

DISCIPLINE :

SYSTEM NAME : Transformers & Pumps Water Spray System

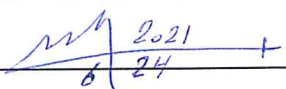
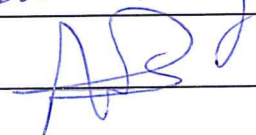
SYSTEM ID : 030-LP-009

SUB-SYSTEM NAME :

SUB-SYSTEM ID :

No	DESCRIPTION	CAT	ACTION BY	DISP	CLEARANCE APPROVED BY
1	(SV-002) Instrument to be installed	A	PTJ	Elec	Clear M. Omar
2	(SV-002) cable to be terminated and tested	A	PTJ	Elec	
3	(PSH-010) Cable to be terminated and tested	A	PTJ	Elec	
4	(PSH-009) Cable to be tested	A	PTJ	Elec	
5	(SV-001) Instrument to be installed	A	PTJ	Elec	
6	Cable tray to be installed for devices	B	PTJ	Elec	
7	(SV-001) Cable to be tested	A	PTJ	Elec	
8	Six remaining Loops to be reinstated	A	PTJ	Mech	PTJ
9	Wall openings to be sealed	B	PTJ	Civil	PTJ
10	House Keeping for Transformers Area	B	PTJ	Civil	PTJ

CAT: CATEGORY (A,B,C) , ACTION BY: (ENPPI, CONST. CONTRACTOR, SUPPLIER...), DISP: DISCIPLINE (PIP, MECH, ELECT, INST...)

COMPANY	PETROJET	ENPPI	SUMED PME
NAME	Abdullah Ramadan	Abdullah Enty	Mohamed Omar
SIGNATURE			M. Omar
DATE	2021 6/24		



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

4- System Limits Marked Up P&ID



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

5- System Index



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

6- Piping Pre-Commissioning



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

6.01- Piping Test Packs



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

6.02- Piping Pre-commissioning Check Lists



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

7- Piping Commissioning



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

7.01- Service Test, GLT, CLT and N2 Purging Certificates



Service Test Certificate of Completion and Acceptance

Client	Egyptian General Petroleum Corporation (EGPC)
Project No.	1251-100
Project Description	Crude Oil Tank Farm Project
Location	Agrood Area 30 (Module-01)
System	030-LP-009 (Transformers & Pumps Water Spray System)
Loop No.	030-LP-009 (Transformers & Pumps Water Spray System)
Test Medium	Firefighting Water
Test Pressure	Service Test
Completion Date	31-8-2021
Attachments	Leak Test Loop Marked-up P&ID

Remarks

- This is to certify that the system described in this certificate of completion has been **Leak tested using water** after final reinstatement and mechanical completion for the system in accordance with the requirements of the scope of work.
- The test has been witnessed by client representatives and accepted as complete in all aspects on the data marked on the certificate of completion and acceptance.
- The test has been completed to the client satisfaction.

Performed by PETROJET	Supervised by ENPPI	Approved by PPC
Name: <i>Ahmed El Sayed</i>	Name: <i>Ahmed El Shafie</i>	Name: <i>M. Saleh</i>
Title: <i>Hydrotest Engineer</i>	Title: <i>Commissioning Manager</i>	Title: <i>Site Manager</i>
Signature: <i>[Signature]</i>	Signature: <i>[Signature]</i>	Signature: <i>[Signature]</i>
Date: <i>31/8/2021</i>	Date: <i>31-8-2021</i>	Date: <i>31/08/2021</i>



Service Test Certificate of Completion and Acceptance

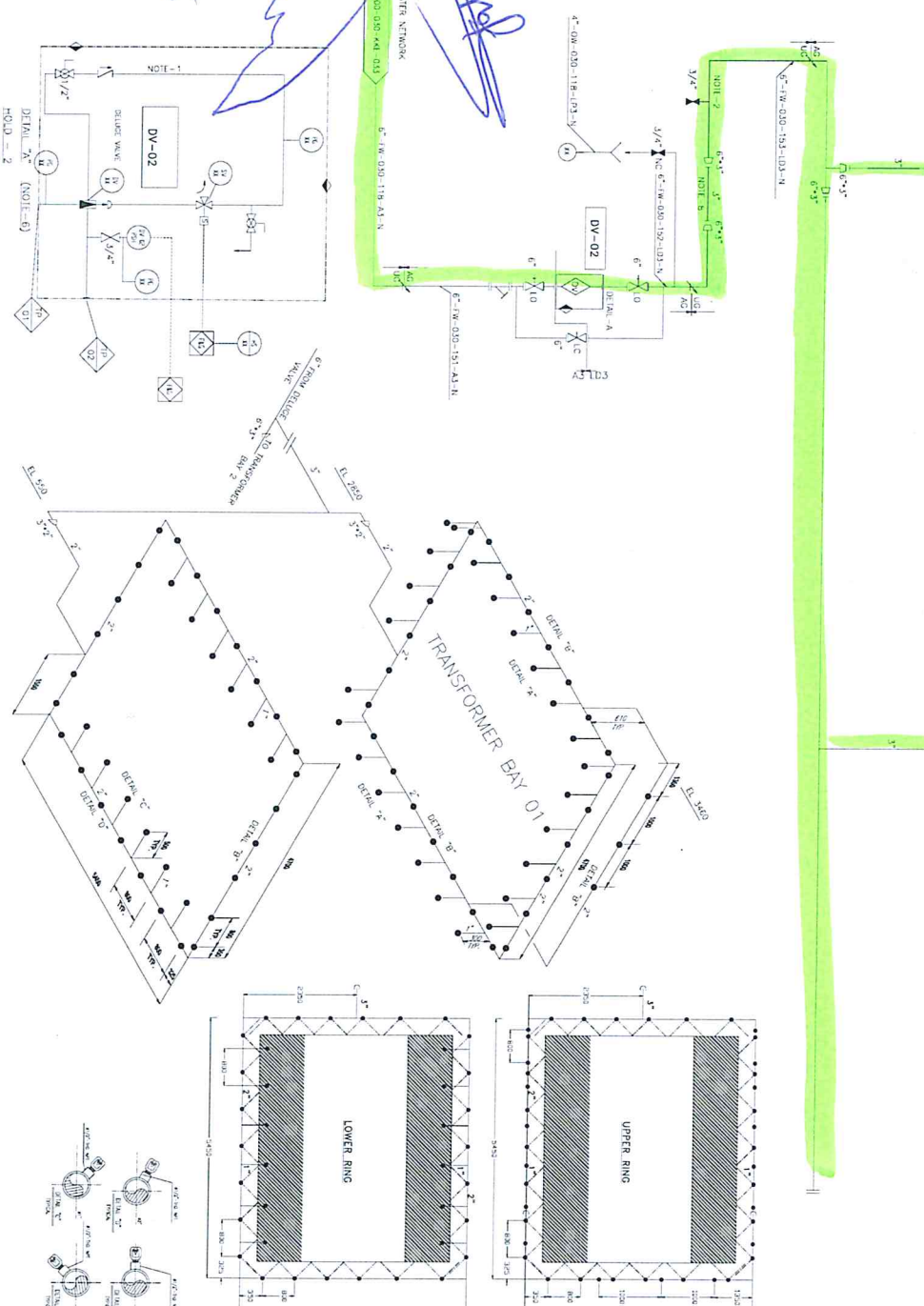
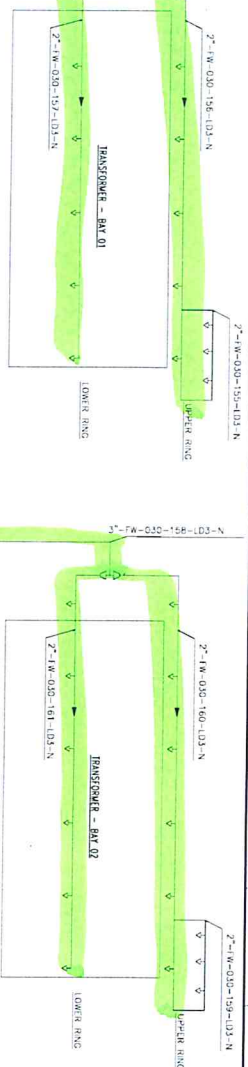
Client	Egyptian General Petroleum Corporation (EGPC)
Project No.	1251-100
Project Description	Crude Oil Tank Farm Project
Location	Agrood Area 30 (Module-01)
System	030-LP-009 (Transformers & Pumps Water Spray System)
Loop No.	030-LP-009 (Transformers & Pumps Water Spray System)
Test Medium	Firefighting Water
Test Pressure	Service Test
Completion Date	31-8-2021
Attachments	Leak Test Loop Marked-up P&ID

Remarks

- This is to certify that the system described in this certificate of completion has been **Leak tested using water** after final reinstatement and mechanical completion for the system in accordance with the requirements of the scope of work.
- The test has been witnessed by client representatives and accepted as complete in all aspects on the data marked on the certificate of completion and acceptance.
- The test has been completed to the client satisfaction.

Performed by PETROJET	Supervised by ENPPI	Approved by PPC
Name: <i>Ahmed El Sayed</i>	Name: <i>Ahmed El Shafie</i>	Name: <i>M. Saleh</i>
Title: <i>Hydrotest Engineer</i>	Title: <i>Commissioning Manager</i>	Title: <i>Site Manager</i>
Signature: <i>[Signature]</i>	Signature: <i>[Signature]</i>	Signature: <i>[Signature]</i>
Date: <i>31/8/2021</i>	Date: <i>31-8-2021</i>	Date: <i>31/08/2021</i>

WATER SPRAY SYSTEM	
NOZZLE MAKE	90 DEG
ORIFICE SIZE	1/2"
6" SECTION	12.5 lpm/ft ²
CONCRETE INSULATION	2" MIN
NO. OF NOZZLES	25
WATER SPRAY SYSTEM	4650
REFERENCE FROM DATE	5100



DOCUMENT NUMBER	DESCRIPTION
01251-100-030-KKE-033	FIRE WATER NETWORK P&ID

NOTES

- DELUGE VALVE MANUFACTURE STANDARD 100A
- LOW POINTS DOWN STREAM DELUGE VALVES SHALL BE FITTED WITH DRAIN VALVES WITH SIZE 3/4"
- WATER SPRAY NOZZLES SHALL BE LOCATED 300 MM OUT OF PROTECTED TRANSFORMER BORDERS.
- WATER SPRAY SYSTEM SHALL BE DESIGNED AS PER NFPA-15 AND API 2020.
- WATER SPRAY DELUGE VALVE SHALL BE ACTIVATED AUTOMATICALLY BY F&G DETECTION SYSTEM AND MANUALLY BY MANUAL LEVER ON DELUGE VALVE.
- FOR DETAILS OF DELUGE VALVE, REFER TO VENDOR P&ID HQ/OLD
- FOR LEGEND, SYMBOLS, GENERAL NOTES AND TYPICAL DRAWINGS REFER TO DRAWINGS NO. 1251-100-000-004/003/005.
- REDUCED SPOOL, 3/4" OR 1" SIZE FOR PRESSURE ADJUSTMENT

1. DELETED
2. DELETED

1. DELETED
2. DELETED

LEGEND

- WATER SPRAY NOZZLE
- DELUGE VALVE
- WATER SPRINKLER
- BAUL VALVE (CLOSED)

NOTES

THIS DRAWING WAS NOT REVIEWED BY THE CLIENT. IT IS THE RESPONSIBILITY OF THE CLIENT TO ENSURE THAT THE DESIGN IS ACCORDING TO THE REQUIREMENTS OF THE PROJECT. THE CLIENT SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE PROJECT. THE CLIENT SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE PROJECT.

EGPC

CRUDE OIL TANK FARM PROJECT
AGROD AREA (MODULE-1)
OIL TYPE TRANSFORMERS
PIPING & INSTRUMENTATION DIAGRAM

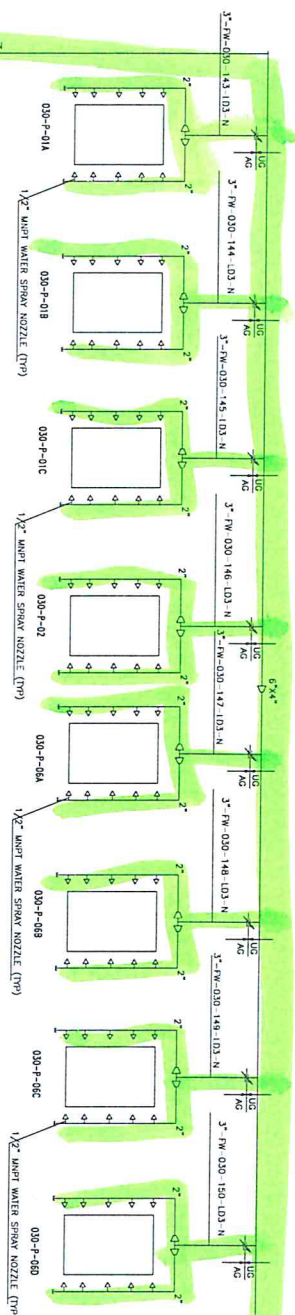
ENGINEERING FOR THE PETROLEUM AND PROCESS INDUSTRIES

Enppi

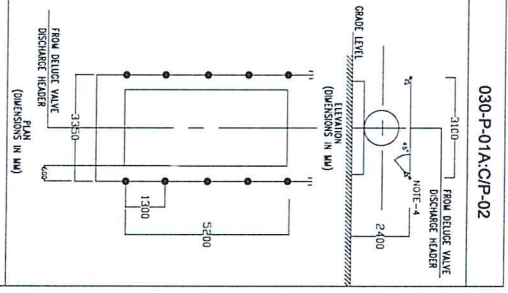
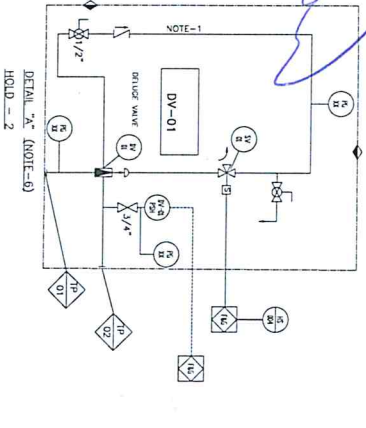
PROJECT NO. 1251-100
SHEET (2/2)

REVISION

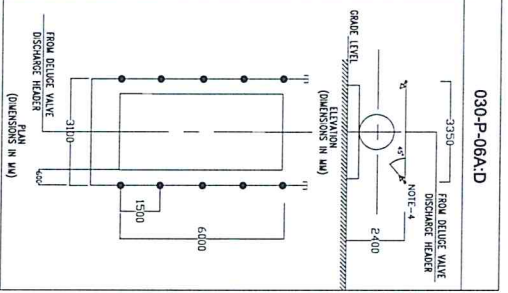
1



STP



030-P-01A/C/P-02 (NOTE-6)	
WATER SPRAY SYSTEM	
NOZZLE ANGLE	90°
K FACTOR	22 LPM/150'
OPERATING PRESSURE	9.8 BAR
FLOW RATE / NOZZLE	60 LPM
NO. OF NOZZLES	10
THEORETICAL FLOW RATE	600 LPM
ACTUAL FLOW RATE	575 LPM



030-P-06A/D (NOTE-6)	
WATER SPRAY SYSTEM	
NOZZLE ANGLE	90°
K FACTOR	22 LPM/150'
OPERATING PRESSURE	9.8 BAR
FLOW RATE / NOZZLE	60 LPM
NO. OF NOZZLES	10
THEORETICAL FLOW RATE	600 LPM
ACTUAL FLOW RATE	575 LPM

DOCUMENT NUMBER	DESCRIPTION
01251-100-030-KKE-033	FIRE WATER NETWORK PAID -

REFERENCES

NOTES
1. DELUGE VALVE MANUFACTURE STANDARD TBM.
2. LOW POINTS DOWN STREAM DELUGE VALVES SHALL BE FITTED WITH MANUAL DRAIN VALVES WITH SIZE 3/4".
3. WATER SPRAY NOZZLES WILL BE LOCATED OUT OF PROTECTED PUMPS BORDERS.
4. WATER SPRAY SYSTEM SHALL BE DESIGNED AS PER NFPA-15 AND API 2030.
5. WATER SPRAY DELUGE VALVE SHALL BE ACTIVATED AUTOMATICALLY BY F&G DETECTION SYSTEM AND MANUALLY BY MANUAL LEVER ON DELUGE VALVE.
6. FOR DETAILS OF DELUGE VALVE, REFER TO VENDOR PAID NO.(HOLD).
7. FOR LEGEND, SYMBOLS, GENERAL NOTES AND TYPICAL DRAWINGS REFER TO DRAWINGS NO. 1251-100-000-000/000/000.
8. WATER SPRAY NOZZLE SUPPLIED BY FIRE FIGHTING SYSTEM SUPPLIER, WITH CONNECTION 1/2" MNPT.

LEGEND
WATER SPRAY NOZZLE
DELUGE VALVE
Y STRAINER
BALL VALVE (CLOSED)
Empty

1. DELUGE VALVE DETAILS IS PRELIMINARY AND SHALL BE VERIFIED AFTER RECEIVING VENDOR DATA.
2. PENDING VENDOR PRINT.

UTILITIES SYMBOLS

(U) ONLY WATER DRAIN

NO.	DATE	DESCRIPTION	PROCESS	LEAD ENG.	DESIGN	CHKD	APPD	REV	BY	DATE
1	12/11/2021	ISSUED FOR CONSTRUCTION								
2	12/11/2021	ISSUED FOR DESIGN								
3	12/11/2021									
4	12/11/2021									
5	12/11/2021									
6	12/11/2021									
7	12/11/2021									
8	12/11/2021									
9	12/11/2021									
10	12/11/2021									
11	12/11/2021									
12	12/11/2021									
13	12/11/2021									
14	12/11/2021									
15	12/11/2021									
16	12/11/2021									
17	12/11/2021									
18	12/11/2021									
19	12/11/2021									
20	12/11/2021									



FOR EGYPTIAN GENERAL PETROLEUM CORPORATION

CRUDE OIL TANK FARM PROJECT
AGROOD AREA MOD-1
CRUDE OIL SHIPPING PUMPS
WATER SPRAY SYSTEM
PIPING & INSTRUMENTATION DIAGRAM

EGPC
Engineering for the Petrochemical and Process Industries

SCALE	PROJECT NO.	DRAWING NUMBER	REGION
NONE	1251-100	01251-100-030-KKE-034	1

(SHEET 1/2)



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

7.02- Piping Commissioning Check Lists



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

8- Mechanical Pre-Commissioning



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

8.01- System Mechanical Index



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

8.02- Equipment Drawings



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

8.03- Equipment Datasheets



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

8.04- Boxing-up Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

8.05- Grouting Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

8.06- Pre-Alignment Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

8.07- Mechanical Pre-Commissioning Checklists



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

9- Mechanical Commissioning



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

9.01- Final Alignment Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

9.02- Motor Solo Run Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID

030-LP-009

System Description

Transformers & pumps water spray system

9.03- Mechanical Run Test (MRT) Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

9.04- Mechanical Commissioning Checklists



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

9.05- Mechanical Supplier Check Lists & Reports



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

10- Instrumentation Pre-Commissioning



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

10.01- System Instrument Index



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

10.02- Instrument Data Sheets



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

10.03- Instrument Cable Schedule



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

10.04- System Instrumentation Wiring Diagram



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

10.05- Hook-up Drawing (Mechanical & Pneumatic)



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

10.06- Instruments Cables Schedule



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

10.07- Instruments Cables Laying Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

10.08- Instruments Cables Termination Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

10.09- Instruments Cables Testing Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

10.10- Instruments Calibration Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

10.11- Instrument Loop Checks Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

10.12- Instrumentation Pre-Commissioning Check Lists



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

10.13- Instrumentation Supplier Check Lists & Reports



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

11- Instrumentation Commissioning



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

11.01- Instrumentation Function Test Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

11.02- Instrumentation Supplier Check Lists & Reports



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

12- Electrical Pre-Commissioning



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

12.01- System Electrical Index

U30-LP-U09
030-LP-009

Transformers & pumps water spray system
Transformers & pumps water spray system

Loss Prevention
Loss Prevention

030-DV-001
030-DV-002

Deluge Valve
Deluge Valve

Checklist
Checklist

LP-04 A
LP-04 A

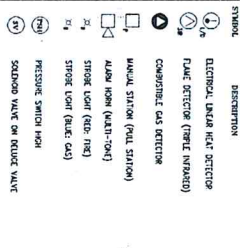
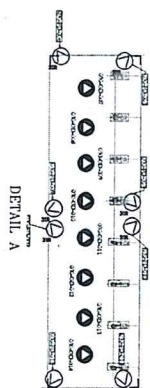


Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

12.02- Electrical Drawings





Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

12.03- Motor Datasheets



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

12.04- Electrical Cables Schedule

ITEM	CABLE TAG	CABLE COMPOSITION mm2	SIGNAL TYPE	SHIELDING		ARM	FROM	TO	LENGTH (m)	EXT. COLOUR SHEATH	EXT. DIAM (mm)	GLAND TYPE (NOTE-2)	DRUM NO.	CABLE CODE	NOTE	Rev
				overall	Indiv.											
6	000FD002	1 X 3 X 2.5 mm2	AI		YES	YES	000G0002	000AUBF01	420	RED	17.53	PAP901-M20	CD-000-F8-02	F8		2
7	000FD004	1 X 3 X 2.5 mm2	AI		YES	YES	000FD004	000AUBF01	910	RED	17.53	PAP901-M20	CD-000-F8-03	F8		2
8	000G0004	1 X 3 X 2.5 mm2	AI		YES	YES	000G0004	000AUBF01	910	RED	17.53	PAP901-M20	CD-000-F8-03	F8		2
9	000G0006	1 X 3 X 1.5 mm2	AI		YES	YES	000G0006	000AUBF01	20	RED	16	PAP901-M20	CD-000-F5-01	F5		2
10	000G0008	1 X 3 X 1.5 mm2	AI		YES	YES	000G0008	000AUBF01	20	RED	16	PAP901-M20	CD-000-F5-01	F5		2
11	000AUBF02	12 X 3 X 1.5 mm2	ANALOG	YES	YES	YES	000AUBF02	MARSHALLING CABINET	400	RED	11.81	PAP901-M20	CD-000-F11-01	F11		2
1	000FD013	1 X 3 X 1.5 mm2	AI		YES	YES	000FD013	000AUBF02	130	RED	16	PAP901-M20	CD-000-F5-01	F5		2
2	000G0015	1 X 3 X 1.5 mm2	AI		YES	YES	000G0015	000AUBF02	130	RED	16	PAP901-M20	CD-000-F5-01	F5		2
3	000FD006	1 X 3 X 1.5 mm2	AI		YES	YES	000FD006	000AUBF02	80	RED	16	PAP901-M20	CD-000-F5-01	F5		2
4	000G0009	1 X 3 X 1.5 mm2	AI		YES	YES	000G0009	000AUBF02	50	RED	16	PAP901-M20	CD-000-F5-01	F5		2
5	000G0010	1 X 3 X 1.5 mm2	AI		YES	YES	000G0010	000AUBF02	40	RED	16	PAP901-M20	CD-000-F5-01	F5		2
6	000G0007	1 X 3 X 1.5 mm2	AI		YES	YES	000G0007	000AUBF02	60	RED	16	PAP901-M20	CD-000-F5-01	F5		2
7	000G0008	1 X 3 X 1.5 mm2	AI		YES	YES	000G0008	000AUBF02	20	RED	16	PAP901-M20	CD-000-F5-01	F5		2
8	000FD007	1 X 3 X 1.5 mm2	AI		YES	YES	000FD007	000AUBF02	20	RED	16	PAP901-M20	CD-000-F5-01	F5		2
9	000FD005	1 X 3 X 1.5 mm2	AI		YES	YES	000FD005	000AUBF02	90	RED	16	PAP901-M20	CD-000-F5-01	F5		2
12	000AUBF03	12 X 3 X 1.5 mm2	ANALOG	YES	YES	YES	000AUBF03	MARSHALLING CABINET	400	RED	11.81	PAP901-M20	CD-000-F11-02	F11		2
1	000FD010	1 X 3 X 1.5 mm2	AI		YES	YES	000FD010	000AUBF03	80	RED	16	PAP901-M20	CD-000-F5-01	F5		2
2	000FD011	1 X 3 X 1.5 mm2	AI		YES	YES	000FD011	000AUBF03	120	RED	16	PAP901-M20	CD-000-F5-01	F5		2
3	000FD008	1 X 3 X 1.5 mm2	AI		YES	YES	000FD008	000AUBF03	30	RED	16	PAP901-M20	CD-000-F5-01	F5		2
4	000G0013	1 X 3 X 1.5 mm2	AI		YES	YES	000G0013	000AUBF03	90	RED	16	PAP901-M20	CD-000-F5-01	F5		2
5	000G0014	1 X 3 X 1.5 mm2	AI		YES	YES	000G0014	000AUBF03	110	RED	16	PAP901-M20	CD-000-F5-01	F5		2
6	000G0011	1 X 3 X 1.5 mm2	AI		YES	YES	000G0011	000AUBF03	20	RED	16	PAP901-M20	CD-000-F5-01	F5		2
7	000G0012	1 X 3 X 1.5 mm2	AI		YES	YES	000G0012	000AUBF03	70	RED	16	PAP901-M20	CD-000-F5-01	F5		2
8	000FD012	1 X 3 X 1.5 mm2	AI		YES	YES	000FD012	000AUBF03	120	RED	16	PAP901-M20	CD-000-F5-01	F5		2
9	000FD009	1 X 3 X 1.5 mm2	AI		YES	YES	000FD009	000AUBF03	50	RED	16	PAP901-M20	CD-000-F5-01	F5		2
14	000P168	4 X 2 X 1.5 mm2	DIGITAL	YES	NO	YES	000P168	MARSHALLING CABINET	220	RED	23.2	PAP902-M25	CD-000-F7-01	F7		2
15	000P169	4 X 2 X 1.5 mm2	DIGITAL	YES	NO	YES	000P169	MARSHALLING CABINET	220	RED	23.2	PAP902-M25	CD-000-F7-01	F7		2
16	000P168	8 X 2 X 1.5 mm2	DIGITAL	YES	NO	YES	000P168	MARSHALLING CABINET	240	RED	29.2	PAP902-M32	CD-000-F8-02	F8		2
17	000P168	8 X 2 X 1.5 mm2	DIGITAL	YES	NO	YES	000P168	MARSHALLING CABINET	240	RED	29.2	PAP902-M32	CD-000-F8-02	F8		2
18	000P168	8 X 2 X 1.5 mm2	DIGITAL	YES	NO	YES	000P168	MARSHALLING CABINET	240	RED	29.2	PAP902-M32	CD-000-F8-02	F8		2
19	000P169	12 X 2 X 1.5 mm2	DIGITAL	YES	NO	YES	000P169	MARSHALLING CABINET	470	RED	33.5	PAP902-M40	CD-000-F10-02	F10		2
20	000P169	12 X 2 X 1.5 mm2	DIGITAL	YES	NO	YES	000P169	MARSHALLING CABINET	470	RED	33.5	PAP902-M40	CD-000-F10-02	F10		2
21	000P169	12 X 2 X 1.5 mm2	DIGITAL	YES	NO	YES	000P169	MARSHALLING CABINET	690	RED	33.5	PAP902-M40	CD-000-F10-02	F10		2
22	000P169	12 X 2 X 1.5 mm2	DIGITAL	YES	NO	YES	000P169	MARSHALLING CABINET	700	RED	33.5	PAP902-M40	CD-000-F10-02	F10		2
23	000P169	12 X 2 X 1.5 mm2	DIGITAL	YES	NO	YES	000P169	MARSHALLING CABINET	690	RED	33.5	PAP902-M40	CD-000-F10-02	F10		2
24	SUB-SLC	1 X 2 X 1.5 mm2	DIGITAL	NO	NO	NO	000GATE01	MARSHALLING CABINET	820	RED	33.5	PAP904-M40	CD-000-F13-01	F13		2
25	SUB-SLC	1 X 2 X 1.5 mm2	DIGITAL	NO	NO	NO	FACP	INPUT DEVICES	1000	RED	11.81		CD-000-F1-01	F1		2
26	PLC	80X15 mm2	DIGITAL	YES	NO	NO	FACP	OUTPUT DEVICES	1000	RED	13.1		CD-000-F2-01	F2		2
27	HWAC	1 X 2 X 1.5 mm2	DO	NO	NO	NO	FACP	PLC	45	RED	29.2	PAP903-M32	CD-000-F8-02	F8		2
28	ESD	1 X 2 X 1.5 mm2	DO	NO	NO	NO	FACP	HWAC	45	RED	11.81		CD-000-F1-01	F1		2
29	HWI	CAT96	SERIAL	NO	NO	NO	PLC	ESD	20	RED	11.81		CD-000-F1-01	F1		2
30	BAT-CHARG	1 X 2 X 1.5 mm2	DO	NO	NO	NO	PLC	WORKSTATION	25	RED					BY SUPPLIER	2
31	000P169	1 X 2 X 1.5 mm2	DI	NO	NO	YES	000P169	BATTERY CHARGER	70	RED	11.81		CD-000-F1-01	F1		2
32	000S002	1 X 2 X 2.5 mm2	DO	NO	NO	YES	000S002	FACP	220	RED	15.2	PAP901-M20	CD-000-F3-03	F3		2
33	GATE-SLC	1 X 2 X 1.5 mm2	DIGITAL	NO	NO	NO	FACP	DO	220	RED	16.7	PAP901-M20	CD-000-F4-01	F4		2
34	GATE-SLC	1 X 2 X 1.5 mm2	DIGITAL	NO	NO	NO	FACP	DO	40	RED	11.81	PAP901-M20	CD-000-F4-01	F4		2
35	000P169	1 X 2 X 2.5 mm2	DIGITAL	NO	NO	NO	FACP	INPUT DEVICES	30	RED	13.1		CD-000-F3-01	F3		2
36	000P169	1 X 2 X 1.5 mm2	DIGITAL	NO	NO	YES	000P169	OUTPUT DEVICES	10	RED	15.2	PAP901-M20	CD-000-F3-03	F3		2
37	000P169	1 X 2 X 1.5 mm2	DIGITAL	NO	NO	YES	000P169	000P169	10	RED	15.2	PAP901-M20	CD-000-F3-03	F3		2
38	000P169	1 X 2 X 1.5 mm2	DIGITAL	NO	NO	YES	000P169	000P169	10	RED	15.2	PAP901-M20	CD-000-F3-03	F3		2
39	000P169	1 X 2 X 1.5 mm2	DIGITAL	NO	NO	YES	000P169	000P169	10	RED	15.2	PAP901-M20	CD-000-F3-03	F3		2
40	000P169	1 X 2 X 1.5 mm2	DIGITAL	NO	NO	YES	000P169	000P169	10	RED	15.2	PAP901-M20	CD-000-F3-03	F3		2
41	000P169	1 X 2 X 1.5 mm2	DIGITAL	NO	NO	YES	000P169	000P169	10	RED	15.2	PAP901-M20	CD-000-F3-03	F3		2
42	000P169	1 X 2 X 1.5 mm2	DIGITAL	NO	NO	YES	000P169	000P169	10	RED	15.2	PAP901-M20	CD-000-F3-03	F3		2
43	000P169	1 X 2 X 1.5 mm2	DIGITAL	NO	NO	YES	000P169	000P169	10	RED	15.2	PAP901-M20	CD-000-F3-03	F3		2
44	000P169	1 X 2 X 1.5 mm2	DIGITAL	NO	NO	YES	000P169	000P169	10	RED	15.2	PAP901-M20	CD-000-F3-03	F3		2
45	000P169	1 X 2 X 1.5 mm2	DIGITAL	NO	NO	YES	000P169	000P169	10	RED	15.2	PAP901-M20	CD-000-F3-03	F3		2
46	000P169	1 X 2 X 1.5 mm2	DIGITAL	NO	NO	YES	000P169	000P169	10	RED	15.2	PAP901-M20	CD-000-F3-03	F3		2

	TB NO.	TERMINAL STRIP/SIGNAL
Cabinet No.1	TB 5	TB5-1/SIG9B+
		TB5-2/SIG9B-
		TB5-3/SIG10B+
		TB5-4/SIG10B-
	TB 8	TB5-5/SIG11B+
		TB5-6/SIG11B-
		TB8-1/SIG15B+
		TB8-2/SIG15B-
		TB8-3/SIG16B+
		TB8-4/SIG16B-
		TB8-5/SIG17B+
		TB8-6/SIG17B-
		TB8-7/SIG18B+
		TB8-8/SIG18B-
	TB 9	TB8-9/SIG19B+
		TB8-10/SIG19B-
		TB8-11/SIG20B+
		TB8-12/SIG20B-
	TB 9	TB9-1/SLC2B+
		TB9-2/SLC2B-
		TB9-3/SLC2A+
		TB9-4/SLC2A-

	TB NO.	TERMINAL STRIP/SIGNAL
Cabinet No.2	TB 12	TB12-1/AUX13C
		TB12-2/AUX13C
		TB12-3/AUX14C
		TB12-4/AUX14C
		TB12-5/AUX15C
		TB12-6/AUX15C
		TB12-7/AUX16C
		TB12-8/AUX16C
		TB12-9/AUX17C
		TB12-10/AUX17C
		TB12-11/AUX18C
		TB12-12/AUX18C
		TB12-13/AUX19C
		TB12-14/AUX19C
		TB12-15/AUX20C
		TB12-16/AUX20C
	TB 16	TB16-1/SIG33B+
		TB16-2/SIG33B-
		TB16-3/SIG34B+
		TB16-4/SIG34B-
		TB16-5/SIG35B+
		TB16-6/SIG35B-
		TB16-7/SIG36B+
		TB16-8/SIG36B-
	TB 17	TB16-9/SIG37B+
		TB16-10/SIG37B-
		TB16-11/SIG38B+
		TB16-12/SIG38B-
		TB17-1/SIG39B+
		TB17-2/SIG39B-
		TB17-3/SIG40B+
		TB17-4/SIG40B-
	TB 6	TB17-5/SIG41B+
		TB17-6/SIG41B-
		TB17-7/SIG42B+
		TB17-8/SIG42B-
		TB17-9/SIG43B+
		TB17-10/SIG43B-
		TB17-11/SIG44B+
		TB17-12/SIG44B-
	TB 10	TB6-1/lo17
		TB6-2/lo17c
		TB6-3/lo18
	TB 10	TB6-4/lo18c
		TB10-1/SLC3B+
		TB10-2/SLC3B-
		TB10-3/SLC3A+
		TB10-4/SLC3A-

	TB NO.	TERMINAL STRIP/SIGNAL
Cabinet No.3	TB 11	TB11-1/AUX9C
		TB11-2/AUX9C
		TB11-3/AUX10C
		TB11-4/AUX10C
		TB11-5/AUX11C
		TB11-6/AUX11C
		TB11-7/AUX12C
		TB11-8/AUX12C
	TB 13	TB13-1/SIG21B+
		TB13-2/SIG21B-
		TB13-3/SIG22B+
		TB13-4/SIG22B-
		TB13-5/SIG23B+
		TB13-6/SIG23B-
		TB13-7/SIG24B+
		TB13-8/SIG24B-
	TB 14	TB13-9/SIG25B+
		TB13-10/SIG25B-
		TB13-11/SIG26B+
		TB13-12/SIG26B-
		TB14-1/SIG27B+
		TB14-2/SIG27B-
		TB14-3/SIG28B+
		TB14-4/SIG28B-
		TB14-5/SIG29B+
		TB14-6/SIG29B-

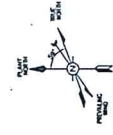


Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)

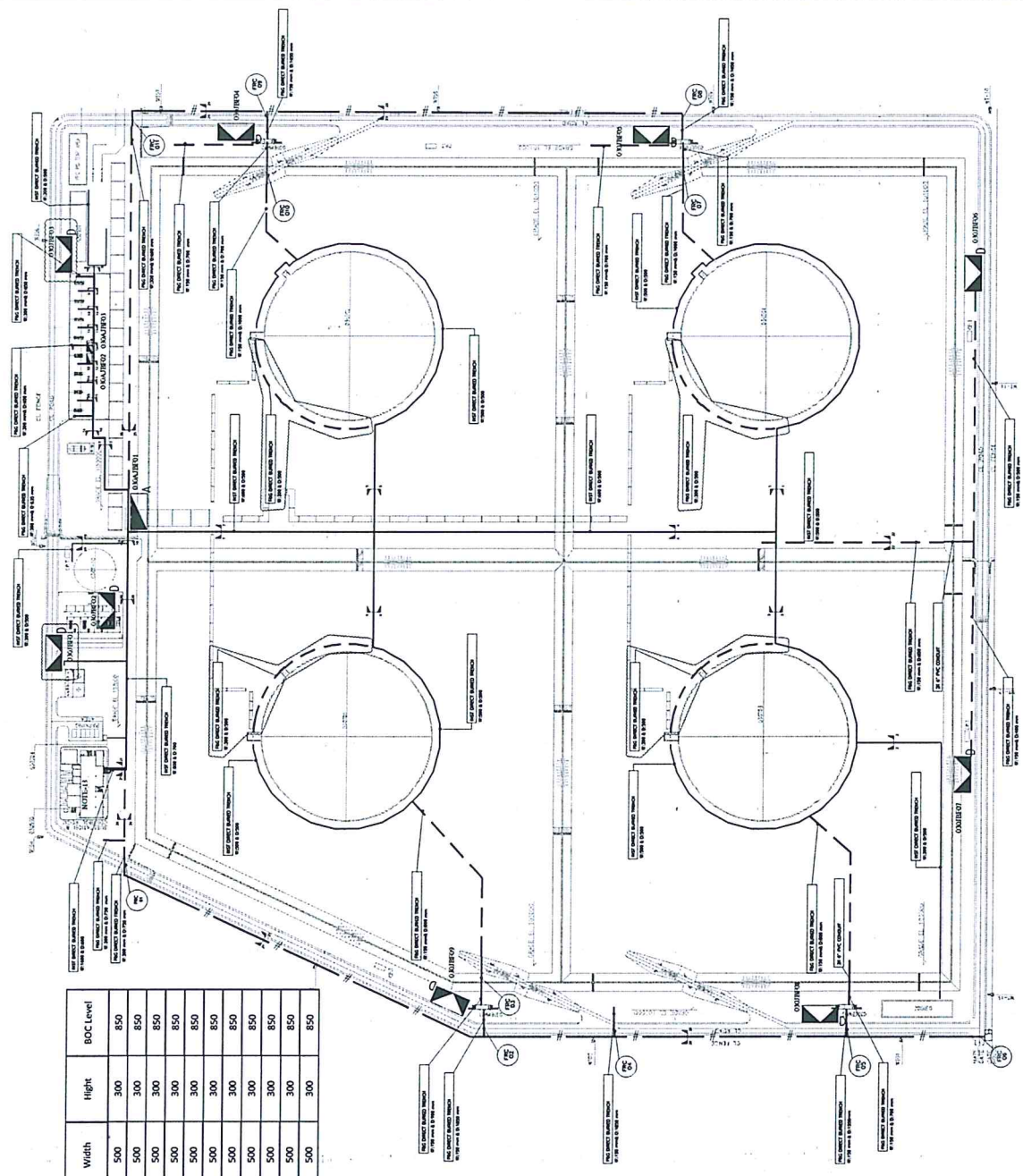


System ID	030-LP-009
System Description	Transformers & pumps water spray system

12.05- Electrical Cables Laying Certificates



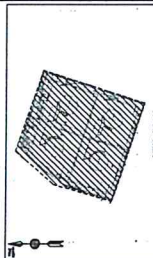
Area No.	REC No.	No. of layers	No. sleeves per layer	Length (m)	Width	Height	BOC Level
030	FRC 01	1	2	8	500	300	850
	FRC 02	1	2	8	500	300	850
	FRC 03	1	2	23	500	300	850
	FRC 04	1	2	8	500	300	850
	FRC 05	1	2	8	500	300	850
	FRC 06	1	2	10	500	300	850
	FRC 07	1	2	23	500	300	850
	FRC 08	1	2	8	500	300	850
	FRC 09	1	2	8	500	300	850
	FRC 10	1	2	23	500	300	850
	FRC 11	1	2	8	500	300	850




DOCUMENT NUMBER	DESCRIPTION
0121-100-030-001	0121-100-030-001
0121-100-030-002	0121-100-030-002
0121-100-030-003	0121-100-030-003
0121-100-030-004	0121-100-030-004
0121-100-030-005	0121-100-030-005
0121-100-030-006	0121-100-030-006
0121-100-030-007	0121-100-030-007
0121-100-030-008	0121-100-030-008
0121-100-030-009	0121-100-030-009
0121-100-030-010	0121-100-030-010
0121-100-030-011	0121-100-030-011
0121-100-030-012	0121-100-030-012
0121-100-030-013	0121-100-030-013
0121-100-030-014	0121-100-030-014
0121-100-030-015	0121-100-030-015
0121-100-030-016	0121-100-030-016
0121-100-030-017	0121-100-030-017
0121-100-030-018	0121-100-030-018
0121-100-030-019	0121-100-030-019
0121-100-030-020	0121-100-030-020
0121-100-030-021	0121-100-030-021
0121-100-030-022	0121-100-030-022
0121-100-030-023	0121-100-030-023
0121-100-030-024	0121-100-030-024
0121-100-030-025	0121-100-030-025
0121-100-030-026	0121-100-030-026
0121-100-030-027	0121-100-030-027
0121-100-030-028	0121-100-030-028
0121-100-030-029	0121-100-030-029
0121-100-030-030	0121-100-030-030
0121-100-030-031	0121-100-030-031
0121-100-030-032	0121-100-030-032
0121-100-030-033	0121-100-030-033
0121-100-030-034	0121-100-030-034
0121-100-030-035	0121-100-030-035
0121-100-030-036	0121-100-030-036
0121-100-030-037	0121-100-030-037
0121-100-030-038	0121-100-030-038
0121-100-030-039	0121-100-030-039
0121-100-030-040	0121-100-030-040
0121-100-030-041	0121-100-030-041
0121-100-030-042	0121-100-030-042
0121-100-030-043	0121-100-030-043
0121-100-030-044	0121-100-030-044
0121-100-030-045	0121-100-030-045
0121-100-030-046	0121-100-030-046
0121-100-030-047	0121-100-030-047
0121-100-030-048	0121-100-030-048
0121-100-030-049	0121-100-030-049
0121-100-030-050	0121-100-030-050
0121-100-030-051	0121-100-030-051
0121-100-030-052	0121-100-030-052
0121-100-030-053	0121-100-030-053
0121-100-030-054	0121-100-030-054
0121-100-030-055	0121-100-030-055
0121-100-030-056	0121-100-030-056
0121-100-030-057	0121-100-030-057
0121-100-030-058	0121-100-030-058
0121-100-030-059	0121-100-030-059
0121-100-030-060	0121-100-030-060
0121-100-030-061	0121-100-030-061
0121-100-030-062	0121-100-030-062
0121-100-030-063	0121-100-030-063
0121-100-030-064	0121-100-030-064
0121-100-030-065	0121-100-030-065
0121-100-030-066	0121-100-030-066
0121-100-030-067	0121-100-030-067
0121-100-030-068	0121-100-030-068
0121-100-030-069	0121-100-030-069
0121-100-030-070	0121-100-030-070
0121-100-030-071	0121-100-030-071
0121-100-030-072	0121-100-030-072
0121-100-030-073	0121-100-030-073
0121-100-030-074	0121-100-030-074
0121-100-030-075	0121-100-030-075
0121-100-030-076	0121-100-030-076
0121-100-030-077	0121-100-030-077
0121-100-030-078	0121-100-030-078
0121-100-030-079	0121-100-030-079
0121-100-030-080	0121-100-030-080
0121-100-030-081	0121-100-030-081
0121-100-030-082	0121-100-030-082
0121-100-030-083	0121-100-030-083
0121-100-030-084	0121-100-030-084
0121-100-030-085	0121-100-030-085
0121-100-030-086	0121-100-030-086
0121-100-030-087	0121-100-030-087
0121-100-030-088	0121-100-030-088
0121-100-030-089	0121-100-030-089
0121-100-030-090	0121-100-030-090
0121-100-030-091	0121-100-030-091
0121-100-030-092	0121-100-030-092
0121-100-030-093	0121-100-030-093
0121-100-030-094	0121-100-030-094
0121-100-030-095	0121-100-030-095
0121-100-030-096	0121-100-030-096
0121-100-030-097	0121-100-030-097
0121-100-030-098	0121-100-030-098
0121-100-030-099	0121-100-030-099
0121-100-030-100	0121-100-030-100


- NOTES
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
 - ALL ELECTRICAL INSTALLATION WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE IEC STANDARDS.
 - ALL NON-CURRENT CARRYING METAL PARTS OF THE DETECTION AND ALARM SYSTEM SHALL BE GROUNDED EFFECTIVELY IN ACCORDANCE WITH IEC 258.
 - THE DESIGN AND CONSTRUCTION OF THE FIRE ALARM SYSTEM SHALL BE IN ACCORDANCE WITH THE LATEST IEC STANDARDS.
 - THE CABLE ROUTING SHOWN IS INDICATIVE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACTUAL CABLE ROUTING BETWEEN DEVICES AND FACP DURING CONSTRUCTION.
 - CABLE ROUTE FROM CABLE TRAY/TRENCH TO DEVICE SHALL BE FIELD ROUTED BY CONSTRUCTION CONTRACTOR.
 - CABLE SEPARATION BETWEEN SIGNAL, CONTROL & POWER CABLES SHALL BE MIN. 300 MM.
 - CABLE ROUTE MARKER POSTS SHALL BE INSTALLED TO IDENTIFY UNDERGROUND ROUTES.
 - SIGNAL SEPARATION & SEPARATION SHALL BE IN ACCORDANCE WITH IEC STANDARDS.
 - FOR FACP CABLES INSTALLED WITH IEC STANDARDS PLEASE REFER TO IEC SECTION DRAWINGS.
 - CONNECTION FROM CABLE TRENCH TO ANY FIELD DEVICE SHALL BE THROUGH PVC COATED CABLE.
 - INTERFACED CABLES BETWEEN FIRE FIGHTING PUMPS AND FACP SYSTEM PANEL SHALL BE ROUTED IN CABLE TRAY SUPPORTED ON FIRST HORIZONTAL BEAM IN SHED.

- LEGEND
- PVC COATED
 - DIRECT BURIED CABLE TRENCH
 - CONCRETE W/RT. CABLE TRENCH
 - MANHOLE JUNCTION BOX
 - DIRECT BURIED FIRE AND GAS TRENCH
 - MANHOLE JUNCTION BOX
 - TELECOM DIRECT BURIED CABLE TRENCH



KEY PLAN
1. 1:1000 SCALE
2. 1:1000 SCALE
3. 1:1000 SCALE
4. 1:1000 SCALE
5. 1:1000 SCALE
6. 1:1000 SCALE
7. 1:1000 SCALE
8. 1:1000 SCALE
9. 1:1000 SCALE
10. 1:1000 SCALE
11. 1:1000 SCALE
12. 1:1000 SCALE
13. 1:1000 SCALE
14. 1:1000 SCALE
15. 1:1000 SCALE
16. 1:1000 SCALE
17. 1:1000 SCALE
18. 1:1000 SCALE
19. 1:1000 SCALE
20. 1:1000 SCALE
21. 1:1000 SCALE
22. 1:1000 SCALE
23. 1:1000 SCALE
24. 1:1000 SCALE
25. 1:1000 SCALE
26. 1:1000 SCALE
27. 1:1000 SCALE
28. 1:1000 SCALE
29. 1:1000 SCALE
30. 1:1000 SCALE
31. 1:1000 SCALE
32. 1:1000 SCALE
33. 1:1000 SCALE
34. 1:1000 SCALE
35. 1:1000 SCALE
36. 1:1000 SCALE
37. 1:1000 SCALE
38. 1:1000 SCALE
39. 1:1000 SCALE
40. 1:1000 SCALE
41. 1:1000 SCALE
42. 1:1000 SCALE
43. 1:1000 SCALE
44. 1:1000 SCALE
45. 1:1000 SCALE
46. 1:1000 SCALE
47. 1:1000 SCALE
48. 1:1000 SCALE
49. 1:1000 SCALE
50. 1:1000 SCALE
51. 1:1000 SCALE
52. 1:1000 SCALE
53. 1:1000 SCALE
54. 1:1000 SCALE
55. 1:1000 SCALE
56. 1:1000 SCALE
57. 1:1000 SCALE
58. 1:1000 SCALE
59. 1:1000 SCALE
60. 1:1000 SCALE
61. 1:1000 SCALE
62. 1:1000 SCALE
63. 1:1000 SCALE
64. 1:1000 SCALE
65. 1:1000 SCALE
66. 1:1000 SCALE
67. 1:1000 SCALE
68. 1:1000 SCALE
69. 1:1000 SCALE
70. 1:1000 SCALE
71. 1:1000 SCALE
72. 1:1000 SCALE
73. 1:1000 SCALE
74. 1:1000 SCALE
75. 1:1000 SCALE
76. 1:1000 SCALE
77. 1:1000 SCALE
78. 1:1000 SCALE
79. 1:1000 SCALE
80. 1:1000 SCALE
81. 1:1000 SCALE
82. 1:1000 SCALE
83. 1:1000 SCALE
84. 1:1000 SCALE
85. 1:1000 SCALE
86. 1:1000 SCALE
87. 1:1000 SCALE
88. 1:1000 SCALE
89. 1:1000 SCALE
90. 1:1000 SCALE
91. 1:1000 SCALE
92. 1:1000 SCALE
93. 1:1000 SCALE
94. 1:1000 SCALE
95. 1:1000 SCALE
96. 1:1000 SCALE
97. 1:1000 SCALE
98. 1:1000 SCALE
99. 1:1000 SCALE
100. 1:1000 SCALE

**EGPC**
EGPC CRUDE OIL TANK FARM
FIRE AND GAS CABLE ROUTING LAYOUT
AGROOD AREA (MODULE-1)

**Emappi**
ENGINEERING & PROJECT MANAGEMENT
1:1000 01231-100-030-AD-001 01/03 2



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

12.06- Electrical Cables Testing Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

12.07- Electrical Cables Termination Certificates

**Enppi****EGPC CRUDE OIL TANK FARM**Owner: **Egyptian General Petroleum Corporation (EGPC)**

Project No: 01251-100-030

Contractor: **CONSORTIUM (ENPPI / PETROJET)**

Document No: ITR-QC-0003

Revision No. : 02

REQUEST FOR INSPECTION

ACTIVITY :

INS TERMINATION

NOTIFICATION NO. :

PTJ-INST-RFI- 118

DISCIPLINE :

FIRE ALARM

DATE :

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	INS TERMINATION	SUBSTATION AND CONTROL BUILDING/AGROOD-2					
1	FACP-SLC-2 / 030-SUB-FIM-001						
2	030-SUB-FIM-001 / 030-SUB-HD-007						
3	030-SUB-HD-007 / 030-SUB-SD-039						
4	030-SUB-SD-039 / 030-SUB-SL-003						
5	030-SUB-SL-003 / 030-SUB-SD-038						
6	030-SUB-SD-038 / 030-SUB-VB-009						
7	030-SUB-VB-009 / 030-SUB-HR-011						
8	030-SUB-HR-011 / 030-SUB-MR-008						
9	030-SUB-MR-008 / 030-SUB-AS-007						
10	030-SUB-AS-007 / 030-SUB-SL-002						
11	030-SUB-SL-002 / 030-SUB-SD-037						
12	030-SUB-SD-037 / 030-SUB-VB-008						
13	030-SUB-VB-008 / 030-SUB-HR-010						
14	030-SUB-HR-010 / 030-SUB-HR-009						
15	030-SUB-HR-009 / 030-SUB-MR-007						
16	030-SUB-MR-007 / 030-SUB-AS-006						
17	030-SUB-AS-006 / 030-SUB-SD-036						
18	030-SUB-SD-036 / 030-SUB-SD-035						
19	030-SUB-SD-035 / 030-SUB-SD-034						
20	030-SUB-SD-034 / 030-SUB-MCP-003						
21	030-SUB-MCP-003 / 030-SUB-HR-008						
22	030-SUB-HR-008 / 030-SUB-VB-007						
23	030-SUB-VB-007 / 030-SUB-MR-006						
24	030-SUB-MR-006 / 030-SUB-AS-005						
25	030-SUB-AS-005 / 030-SUB-SD-033						
26	030-SUB-SD-033 / 030-SUB-GD-003						
27	030-SUB-GD-003 / 030-SUB-SD-032						
28	030-SUB-SD-032 / 030-SUB-SD-031						
29	030-SUB-SD-031 / 030-SUB-GD-004						
30	030-SUB-GD-004 / 030-SUB-FIM-002						
31	030-SUB-FIM-002 / 030-SUB-SD-020						
32	030-SUB-SD-020 / 030-SUB-SD-019						
33	030-SUB-SD-019 / 030-SUB-AS-003						
34	030-SUB-AS-003 / 030-SUB-MR-004						
35	030-SUB-MR-004 / 030-SUB-VB-004						

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

Cable enclosure cover to be installed.

NAME :	PETROJET	ENPPI	PMC
	<i>Sobh</i>	<i>Islam Sherif</i>	Mohamed Omar
SIGNATURE			M. Omar
DATE			12/9/2011

**Enppi**

EGPC CRUDE OIL TANK FARM



Owner: Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030

Contractor: CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0003
Revision No. : 2**REQUEST FOR INSPECTION**

ACTIVITY: INS TERMINATION

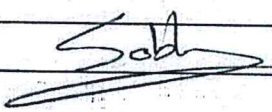
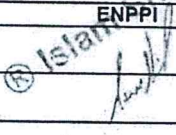
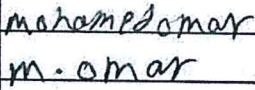
NOTIFICATION NO. : PTJ-INST-RFI-117 DISCIPLINE: FIRE ALARM

DATE:

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	INS TERMINATION	SUBSTATION AND CONTROL BUILDING/AGROOD-2					
1	030-SUB-VB-004 / 030-SUB-HR-006						
2	030-SUB-HR-006 / 030-SUB-SD-021						
3	030-SUB-SD-021 / 030-SUB-SD-022						
4	030-SUB-SD-022 / 030-SUB-SD-024						
5	030-SUB-SD-024 / 030-SUB-SD-023						
6	030-SUB-SD-023 / 030-SUB-VB-005						
7	030-SUB-VB-005 / 030-SUB-SD-025						
8	030-SUB-SD-025 / 030-SUB-SD-026						
9	030-SUB-SD-026 / 030-SUB-SD-028						
10	030-SUB-SD-028 / 030-SUB-SD-027						
11	030-SUB-SD-027 / 030-SUB-SD-029						
12	030-SUB-SD-029 / 030-SUB-VB-006						
13	030-SUB-VB-006 / 030-SUB-HR-007						
14	030-SUB-HR-007 / 030-SUB-AS-004						
15	030-SUB-AS-004 / 030-SUB-MR-005						
16	030-SUB-MR-005 / 030-SUB-SD-030						
17	030-SUB-SD-030 / 030-SUB-SL-001						
18	030-SUB-SL-001 / 030-SUB-FIM-003						
19	030-SUB-FIM-003 / 030-SUB-SD-012						
20	030-SUB-SD-012 / 030-SUB-SD-010						
21	030-SUB-SD-010 / 030-SUB-SD-017						
22	030-SUB-SD-017 / 030-SUB-HR-005						
23	030-SUB-HR-005 / 030-SUB-SD-016						
24	030-SUB-SD-016 / 030-SUB-SD-008						
25	030-SUB-SD-008 / 030-SUB-SD-006						
26	030-SUB-SD-006 / 030-SUB-SD-015						
27	030-SUB-SD-015 / 030-SUB-SD-014						
28	030-SUB-SD-014 / 030-SUB-SD-004						
29	030-SUB-SD-004 / 030-SUB-SD-002						
30	030-SUB-SD-002 / 030-SUB-SD-013						
31	030-SUB-SD-013 / 030-SUB-MR-003						
32	030-SUB-MR-003 / 030-SUB-AS-002						
33	030-SUB-AS-002 / 030-SUB-SD-001						
34	030-SUB-SD-001 / 030-SUB-VB-003						
35	030-SUB-VB-003 / 030-SUB-HR-004						

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

	PETROJET	ENPPI	PMC
NAME:			
SIGNATURE			
DATE			12/9/2021

**Enppi****EGPC CRUDE OIL TANK FARM**Owner : **Egyptian General Petroleum Corporation (EGPC)**

Project No: 01251-100-030

Contractor **CONSORTIUM (ENPPI / PETROJET)**

Document No: ITR-QC-0003

Revision No. : 2

REQUEST FOR INSPECTIONACTIVITY : **INS TERMINATION**NOTIFICATION NO. : **PTJ-INST-RFI-118** DISCIPLINE : **FIRE ALARM**

DATE :

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	INS TERMINATION	SUBSTATION AND CONTROL BUILDING/AGROOD-2					
1	030-SUB-HR-004 / 030-SUB-SD-003						
2	030-SUB-SD-003 / 030-SUB-HD-002						
3	030-SUB-HD-002 / 030-SUB-HD-001						
4	030-SUB-HD-001 / 030-SUB-MR-001						
5	030-SUB-MR-001 / 030-SUB-HR-001						
6	030-SUB-HR-001 / 030-SUB-HD-003						
7	030-SUB-HD-003 / 030-SUB-HD-004						
8	030-SUB-HD-004 / 030-SUB-SD-005						
9	030-SUB-SD-005 / 030-SUB-VB-002						
10	030-SUB-VB-002 / 030-SUB-SD-007						
11	030-SUB-SD-007 / 030-SUB-HD-005						
12	030-SUB-HD-005 / 030-SUB-MCP-001						
13	030-SUB-MCP-001 / 030-SUB-HR-002						
14	030-SUB-HR-002 / 030-SUB-HD-006						
15	030-SUB-HD-006 / 030-SUB-MCP-002						
16	030-SUB-MCP-002 / 030-SUB-SD-009						
17	030-SUB-SD-009 / 030-SUB-SD-018						
18	030-SUB-SD-018 / 030-SUB-GD-002						
19	030-SUB-GD-002 / 030-SUB-GD-001						
20	030-SUB-GD-001 / 030-SUB-SD-040						
21	030-SUB-SD-040 / 030-SUB-SD-041						
22	030-SUB-SD-041 / 030-SUB-MR-002						
23	030-SUB-MR-002 / 030-SUB-AS-001						
24	030-SUB-AS-001 / 030-SUB-SD-011						
25	030-SUB-SD-011 / 030-SUB-VB-001						
26	030-SUB-VB-001 / 030-SUB-HR-003						
27	030-SUB-HR-003 / 030-SUB-FIM-004						
28	030-SUB-FIM-004 / PIS-016						
29	PIS-016/PIS-019						
30	PIS-019/PSL-019						
31	PSL-019/PSL-016						
32	PSL-016/PSL-018						
33	PSL-018/PSL-015						
34	PSL-015/PIS-015						
35	PIS-015/PIS-018						

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

NAME :	PETROJET	ENPPI	PMC
SIGNATURE	<i>Sobh</i>	<i>Islam Sherif</i>	<i>Mshamed amar</i>
DATE			<i>m. amar</i>
			<i>12/9/2021</i>

**Enppi****EGPC CRUDE OIL TANK FARM**Owner : **Egyptian General Petroleum Corporation (EGPC)**

Project No: 01251-100-030

Contractor **CONSORTIUM (ENPPI / PETROJET)**

Document No: ITR-QC-0003

Revision No. : 2

REQUEST FOR INSPECTIONACTIVITY : **INS TERMINATION**NOTIFICATION NO. : **PTJ-INST-RFI- 118** DISCIPLINE : **FIRE ALARM**

DATE :

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	INS TERMINATION	SUBSTATION AND CONTROL BUILDING/AGRO0D-2					
1	PIS-018/PS-004						
2	PS-004/PIS-014						
3	PIS-014/PIS-017						
4	PIS-017/PSL-017						
5	PSL-017/PSL-014						
6	PSL-014/PIS-001						
7	PIS-001/PIS-002						
8	PIS-002/PSL-001						
9	PSL-001/PSL-002						
10	PSL-002/PIS-003						
11	PIS-003/PIS-004						
12	PIS-004/FIM-005						
13	FIM-005/PSL-007						
14	PSL-007/PS-001						
15	PS-001/PS-002						
16	PS-002/PIS-007						
17	PIS-007/PIS-012						
18	PIS-012/PIS-013						
19	PIS-013/PIS-009						
20	PIS-009/PSL-008						
21	PSL-008/PS-003						
22	PS-003/PS-005						
23	PS-005/FIM-006						
24	FIM-006/PIS-006						
25	PIS-006/PIS-011						
26	PIS-011/PIS-005						
27	PIS-005/PIS-010						
28	PIS-010/FIM-007						
29	FIM-007/ RM CONTROL RM						
30	RM CONTROL RM/ RM TELECOM RM						
31	RM TELECOM RM/RM BATTERY RM						
32	RM BATTERY RM/RM PILOT CYLINDERS						
33	RM PILOT CYLINDERS/RM SWITCHGEAR						
34	RM SWITCHGEAR/RM SWITCHGEAR						
35	RM SWITCHGEAR/RM SWITCHGEAR						

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

NAME :	PETROJET	ENPPI	PMC
SIGNATURE	<i>Sobh</i>	<i>Ismael Sherif</i>	<i>Mohamed amar</i>
DATE			<i>m. amar</i>
			<i>12/9/2021</i>

**Enppi****EGPC CRUDE OIL TANK FARM**Owner : **Egyptian General Petroleum Corporation (EGPC)**

Project No: 01251-100-030

Contractor **CONSORTIUM (ENPPI / PETROJET)**

Document No: ITR-QC-0003

Revision No. : 2

REQUEST FOR INSPECTIONACTIVITY : **INS TERMINATION**NOTIFICATION NO. : **PTJ-INST-RFI- 118** DISCIPLINE : **FIRE ALARM**

DATE :

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	INS TERMINATION	SUBSTATION AND CONTROL BUILDING/AGROOD-2					
1	RM SWITCH GEAR RM / RM CELLAR RM						
2	RM CELLAR RM /RM CELLAR RM						
3	RM CELLAR RM /RM CELLAR RM						
4	RM CELLAR RM/ RM 030-SV-002						
5	RM 030-SV-002 / FACP-SLC-2						
6	FACP-SIG-39/ 030-SUB-SL-003						
7	030-SUB-SL-003 / 030-SUB-VB-009						
8	030-SUB-VB-009 / 030-SUB-HR-011						
9	030-SUB-HR-011 / 030-SUB-HR-010						
10	030-SUB-HR-010 / 030-SUB-VB-008						
11	FACP-SIG-41 / 030-SUB-HR-009						
12	030-SUB-HR-009 / 030-SUB-HR-008						
13	030-SUB-HR-008 / 030-SUB-VB-004						
14	030-SUB-VB-004 / 030-SUB-HR-006						
15	030-SUB-HR-006 / 030-SUB-VB-005						
16	FACP-SIG-15 / 030-SUB-SD-033						
17	030-SUB-SD-033 / 030-SUB-GD-003						
18	030-SUB-GD-003 / 030-SUB-SD-032						
19	030-SUB-SD-032 / 030-SUB-SD-031						
20	030-SUB-SD-031 / 030-SUB-GD-004						
21	FACP-SIG-44 / 030-SUB-VB-007						
22	FACP-SIG-40 / 030-SUB-VB-006						
23	030-SUB-VB-006 / 030-SUB-HR-007						
24	030-SUB-HR-007 / 030-SUB-SL-001						
25	030-SUB-SL-001 / 030-SUB-SL-002						
26	FACP-SIG-18 / 030-SUB-GD-002						
27	030-SUB-GD-002 / 030-SUB-GD-001						
28	FACP-SIG-42/ 030-SUB-HR-002						
29	030-SUB-HR-002 / 030-SUB-VB-002						
30	030-SUB-VB-002 / 030-SUB-HR-001						
31	FACP-SIG-43 / 030-SUB-HR-003						
32	030-SUB-HR-003 / 030-SUB-VB-001						
33	030-SUB-VB-001 / 030-SUB-HR-005						
34	030-SUB-HR-005 / 030-SUB-VB-003						
35	030-SUB-VB-003 / 030-SUB-HR-004						

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

NAME :	PETROJET	ENPPI	PMC
SIGNATURE			Mohamed amar
DATE			M. amar
			12/9/2021

**Enppi**

EGPC CRUDE OIL TANK FARM



Owner: Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030

Contractor: CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0003

Revision No.: 2

REQUEST FOR INSPECTION

ACTIVITY: INS TERMINATION

NOTIFICATION NO. : PTJ-INST-RFI- 118 DISCIPLINE : FIRE ALARM

DATE :

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	INS TERMINATION	SUBSTATION AND CONTROL BUILDING/AGROOD-2					
1	FACP-SIG16 / PSL-007						
2	FACP-SIG17 / PSL-008						
3	PSL-008 / PSL-002						
4	PSL-002 / PSL-001						
5	PSL-001 / PSL-017						
6	PSL-017 / PSL-014						
7	PSL-014 / PSL-018						
8	PSL-018 / PSL-015						
9	PSL-015 / PSL-019						
10	PSL-019 / PSL-016						
11	FACP-SIG-21 / CELLAR RM						
12	FACP-SIG-22/ CELLAR RM						
13	FACP-SIG-23/ CELLAR RM						
14	FACP-SIG-24 / SWITCH GEAR RM						
15	FACP-SIG-27 / PILOT CYLINDERS RM						
16	FACP-SIG-28 / 030-SV-002						
17	FACP-SIG-29/ SWITCH GEAR RM						
18	FACP-SIG-33 / SWITCH GEAR RM						
19	FACP-SIG-34 / BATTERY RM						
20	FACP-SIG-35 / TELECOM RM						
21	FACP-SIG-36 / CONTROL RM						
22	RM CELLER ROOM / KMS-002						
23	KMS-002 / M/R-002						
24	M/R-002 / SOV-005						
25	M/R-002 / SOV-010						
26	M/R-002 / SOV-006						
27	M/R-002 / SOV-011						
28	RM CELLER ROOM / KMS-002						
29	KMS-002 / M/R-003						
30	M/R-003 / SOV-007						
31	M/R-003 / SOV-0012						
32	M/R-003 / SOV-009						
33	M/R-003 / SOV-0013						
34	RM SWITCHGEAR / KMS-003						
35							

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

NAME :	PETROJET	ENPPI	PMC
SIGNATURE	<i>Sobh</i>	<i>Islam Sherif</i>	<i>Mohamed Omar</i>
DATE			12/18/2021

**Enppi****EGPC CRUDE OIL TANK FARM**Owner: **Egyptian General Petroleum Corporation (EGPC)**

Project No: 01251-100-030

Contractor: **CONSORTIUM (ENPPI / PETROJET)**Document No: ITR-QC-0003
Revision No. : 2**REQUEST FOR INSPECTION**

ACTIVITY :

INS TERMINATION

NOTIFICATION NO. :

PTJ-INST-RFI- 1/8

DISCIPLINE :

FIRE ALARM

DATE :

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	INS TERMINATION	SUBSTATION AND CONTROL BUILDING/AGROOD-2					
1	KMS-003 / M/R-002						
2	KMS-003 / M/R-003						
3	RM SWITCHGEAR / KMS-003						
4	RM SWITCHGEAR / SOV-003						
5	RM PILOT CYLINDERS / KMS-001						
6	KMS-001 / M/R-001						
7	M/R-001 / SOV-001						
8	M/R-001 / SOV-002						
9	RM BATTERY RM / KMS-004						
10	KMS-004 / M/R-004						
11	M/R-004 / SOV-017						
12	M/R-004 / SOV-014						
13	RM TELECOM RM / KMS-005						
14	KMS-005 / M/R-005						
15	M/R-005 / SOV-018						
16	M/R-005 / SOV-015						
17	RM CONTROL RM / KMS-006						
18	KMS-006 / M/R-006						
19	M/R-006 / SOV-019						
20	M/R-006 / SOV-016						
21	AUX13 / COMMON FIRE ALARM						
22	AUX14 / CONFIRMED FIRE ALARM						
23	AUX15 / COMMON GAS ALARM						
24	AUX16 / CONFIRMED GAS ALARM						
25	AUX17 / COMMON EXTINGUISHING ALARM						
26	AUX18 / COMMON FAULT ALARM						
27	IO18 / REMOT ACTIVATION FOR TRANS. DELUGE VALVE						
28	AUX11 / HVAC TRIP						
29	AUX10 / START STANDBY FAN						
30	AUX19 / STOP AC BATTERY CHARGEING						
31	AUX20 / STOP DC BATTERY CHARGEING						
32	IO17 / TRANS. PRESSUER SWITCH HIGH						
33	RM CELLER ROOM / SOV-004						
34							
35							

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

NAME :	PETROJET	ENPPI	PMC
SIGNATURE	<i>Sobh</i>	<i>Islam Sherif</i>	<i>Mohamed Omar</i>
DATE			<i>m.omar</i>
			<i>12/9/2021</i>



EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

CABLE TERMINATION AND SPLICING

INSPECTION REPORT NUMBER

118

INSPECTION DATE & TIME

ITR NUMBER

ITR-EL-0009

SYSTEM NO.:

DISCIPLINE

ELEC

SHEET NO

1 OF 1

Item/Tag NO.

Type :-

Core:

Size:

NO.	Description of check	RESULT		
		ACCEPT	REJECT	N/A.
1	Check cable glands are correct type and size as per cable schedule.	✓		
2	Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins satisfactory.	✓		
3	Check cable tag is done correctly.			
4	Test and confirm conductor, phase continuity.			✓
5	Check insulation resistance test (megger) is completed *'	✓		
6	Check Hi-pot test is completed, only for MV/HV cables *''			✓
7	Connect all cores at both ends and confirm all connections are correct as per termination diagram.	✓		✓
8	Confirm spare cores, screens are earthed and conform to design drawings/specifications	✓		
9	Check enclosure cover is installed, no damages and no bolts are missing	✗	✗	
10	Calibration test certificate of testing equipment to be checked.			✓

Remarks :

enclosure CO

NAME :	PETROJET	ENPPI	PMC
SIGNATURE	Sobh	® Islam Sherif	m. omor
DATE			

ITR-EL-0009



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

12.08- FAT Reports & Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

12.09- SAT Reports & Certificates



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

12.10- Electrical Pre-Commissioning Check Lists

PRE-COMMISSIONING CHECK LIST WATER SPRAY SYSTEM LP-04 A

PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Loss Prevention

SYSTEM NAME : Transformers & pumps water spray system

SYSTEM ID : 030-LP-009

SUB-SYSTEM NAME : Transformers & pumps water spray system

SUB-SYSTEM ID : 030-LP-009

ITEM TAG No. : 030-DV-002



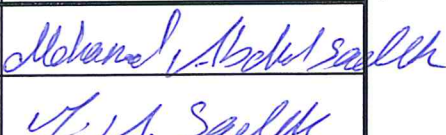
AREA : 30

REF. DWGs/DOCs :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Check that the system is installed around protected equipment as per plot plan and equipment layout.	OK	
2	Check all deluge skid items as per deluge general arrangement drawing.	N/A	
3	Check all devices tags as per deluge P&ID.	OK	
4	Check that all devices are clarified where required.	N/A	
5	Check the piping installed as per piping GA and isometrics complete with vents and drains.	OK	
6	Check that all water spray pipe work on the protected equipment installed as per drawing.	OK	
7	Check that the deluge skid is earthed.	N/A	
8	Check that the water nozzle orientation is as per drawing.	N/A	
9	Check that deluge operation sign is in place and fixed properly.	OK	
10	Check wiring is properly installed as per drawing.	OK	
11	Check instrument system supply.	OK	

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME	Abdullah Fathy	Abdullah Fathy	Abdullah Fathy
SIGNATURE			
DATE			

PRE-COMMISSIONING CHECK LIST WATER SPRAY SYSTEM LP-04 A

PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Loss Prevention

SYSTEM NAME : Transformers & pumps water spray system

SYSTEM ID : 030-LP-009

SUB-SYSTEM NAME : Transformers & pumps water spray system

SUB-SYSTEM ID : 030-LP-009

ITEM TAG No. : 030-DV-002



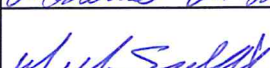
AREA : 30

REF. DWGs/DOCs :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check all instrument air tubing installed and leak tested.	N/A	
13	Check fusible bulb installation and orientation.	N/A	
14	Check deluge skid junction box wiring as per supplier drawing.	N/A	

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME	Abdullah Fady	Abdullah Fady	Abdullah Fady
SIGNATURE			
DATE			

PRE-COMMISSIONING CHECK LIST WATER SPRAY SYSTEM LP-04 A

PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Loss Prevention

SYSTEM NAME : Transformers & pumps water spray system

SYSTEM ID : 030-LP-009

SUB-SYSTEM NAME : Transformers & pumps water spray system

SUB-SYSTEM ID : 030-LP-009

ITEM TAG No. : 030-DV-001

AREA : 30

REF. DWGS/DOCs :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Check that the system is installed around protected equipment as per plot plan and equipment layout.	OK	
2	Check all deluge skid items as per deluge general arrangement drawing.	N/A	
3	Check all devices tags as per deluge P&ID.	OK	
4	Check that all devices are clariberated where required.	N/A	
5	Check the piping installed as per piping GA and isometrics complete with vents and drains.	OK	
6	Check that all water spray pipe work on the protected equipement installed as per drawing.	OK	
7	Check that the deluge skid is earthed.	N/A	
8	Check that the water nozzle orientation is as per drawing.	N/A	
9	Check that deluge operation sign is in place and fixed properly.	OK	
10	Check wiring is properly installed as per drawing.	OK	
11	Check instrument system supply.	OK	

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME	Abdullah Fathy	Abdullah Fathy	Abdullah Fathy
SIGNATURE			
DATE			

PRE-COMMISSIONING CHECK LIST WATER SPRAY SYSTEM LP-04 A

PROJECT TITLE : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

PROJECT NUMBER : 1251-100

DISCIPLINE : Loss Prevention

SYSTEM NAME : Transformers & pumps water spray system

SYSTEM ID : 030-LP-009

SUB-SYSTEM NAME : Transformers & pumps water spray system

SUB-SYSTEM ID : 030-LP-009

ITEM TAG No. : 030-DV-001

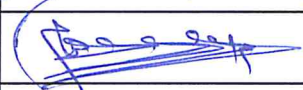

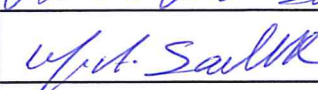
AREA : 30

REF. DWGs/DOCs :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check all instrument air tubing installed and leak tested.	N/A	
13	Check fusible bulb installation and orientation.	N/A	
14	Check deluge skid junction box wiring as per supplier drawing.	N/A	

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME	Abdullah Alar Abdullatif	Abdullah Fathy	Mohamed Abdel Sattar
SIGNATURE			
DATE			



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

12.11- Electrical Supplier Check Lists & Reports



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

13- Electrical Commissioning



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

13.01- Electrical -Commissioning Check Lists



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

13.02- Electrical Supplier Check Lists & Reports



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

14- Red Marked-up Drawings



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

14.01- P&ID



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

14.02- Instrumentation Drawings



Project: 01251-100
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-009
System Description	Transformers & pumps water spray system

14.03- Electrical Drawings